

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for providing a packet-switched network user with a service via the intelligent network, the method comprising: ~~the steps of~~ receiving the network registration of a user in the packet network; ~~(2-1)~~, establishing a session for routing functionality of packets originating from and terminating at the user;

~~characterized by~~

forming for the session a control record ~~(2-5)~~, by which event management is controlled during the session and which has a functional connection to at least one service control function of an intelligent network service; and

defining at least one of the session events as an intelligent network event to the control record ~~(2-5)~~, the encounter of which causes the use of intelligent network control principles.

2. (Currently Amended) A method as claimed in claim 1, ~~characterized by~~ modelling wherein the session is modelled by a state model.

3. (Currently Amended) A method as claimed in claim 1, ~~characterized by~~ further comprising:

maintaining information on at least one intelligent network event in subscriber information;

searching the information from the register including subscriber information when forming the control record ~~(2-2)~~; and

adding the intelligent network events in the subscriber information as intelligent network events of the session ~~(2-5)~~.

4. (Currently Amended) A method as claimed in claim 1, ~~characterized by~~ further comprising:

maintaining at least one intelligent network event in the node serving the user; and

adding the intelligent network events maintained in the node as intelligent network events of the session (2-5).

5. (Currently Amended) A method as claimed in claim 1, ~~characterized by defining wherein~~ the GPRS attach of the user is defined as an intelligent network event of the control record (2-1).

6. (Currently Amended) A method as claimed in claim 1, ~~characterized by defining the PDP wherein the packet data protocol~~ context activation and deactivation are defined as intelligent network events of the control record (2-7, 2-21).

C2 7. (Currently Amended) A method as claimed in claim 6, ~~characterized by defining the PDP wherein the packet data protocol~~ context modification is defined as an intelligent network event of the control record.

8. (Currently Amended) A method as claimed in claim 6, ~~characterized by defining wherein~~ the packet routing is defined as an intelligent network event of the control record.

9. (Currently Amended) A method as claimed in claim 1, ~~characterized by~~ further comprising:

transmitting a message (401) to the service control function of the intelligent network in response to the encounter with the intelligent network event;

receiving (402) a message requesting a report from the intelligent network, which message includes at least one criterion and a condition relating to the criterion, after the fulfilment of which the report is transmitted;

maintaining a criterion counter;

initialising said counter (405); and

starting the monitoring, during which the following steps are repeated:

a) increasing (408) the counter in response to the transferred packet according to the criterion;

b) checking (410) whether the condition given to the criterion is fulfilled, and if the condition fulfils, transmitting the report to the service control function of the intelligent network (412).

10. (Currently Amended) A method as claimed in claim 9, ~~characterized by~~
wherein

said message received from ~~the service control function of the intelligent network~~
being is a message requesting a periodical report; and

the method further comprises:

initialising the counter (405) after transmitting of the report message, and repeating the monitoring steps.

11. (Currently Amended) A method as claimed in claim 1, ~~characterized by~~
further comprising:

transmitting the message to the service control function of the intelligent network
(401) in response to the encounter with the intelligent network event;

receiving (502) a charging message from the intelligent network, which message includes charging criteria;

maintaining the counter;

initialising (506) said counter;

increasing (509) the counter in response to the transferred packet; and

forming a charging record on the basis of the charging criteria and the value of the counter.

12. (Currently Amended) A method as claimed in claim 11, ~~characterized by~~
further comprising:

using a prepaid connection;

searching (504) the amount of money available for the user;

defining (510) the charging price in response to increasing the value of the counter on the basis of the charging criteria and the value of the counter;

comparing (511) the charging price with the available amount of money; and

if the charging price is smaller than the amount of money, continuing the packet transfer; or

if the charging price is not smaller than the amount of money, terminating the packet transfer.

13. (Currently Amended) A method as claimed in claim 1, ~~characterized by defining wherein~~ the allocation of logical and physical connections during the session is defined as an intelligent network event of the control record (2-11).

14. (Currently Amended) A method as claimed in claim 1, ~~characterized by~~ further comprising:

transmitting the information (2-3) on the GPRS attach of the user to the intelligent network;

receiving a certificate message from the intelligent network, which message includes a public key; and

C2 authenticating the user with the public key.

15. (Currently Amended) A method as claimed in claim 1, ~~characterized by defining wherein~~ the GPRS detach of the user is defined as an intelligent network event of the control record (2-27).

16. (Currently Amended) A method for providing a packet-switched network user with a service via the intelligent network, the method comprising the steps of:

activating a PDP packet data protocol context to convey data packets (2-7),

~~characterized by~~

forming for the PDP packet data protocol context a control record, by which the event management of the PDP packet data protocol context is controlled, which control record can be modelled by a state model and which has a functional connection to at least one service control function of an intelligent network service, and

by defining at least one of the PDP packet data protocol context events as an intelligent network event to the control record, which event causes the use of intelligent network control principles.

17. (Currently Amended) A method as claimed in claim 16, ~~characterized by defining the PDP wherein the packet data protocol~~ context activation and deactivation are defined as intelligent network events of the control record (~~2-7, 2-21~~).

18. (Currently Amended) A method as claimed in claim 16, ~~characterized by defining wherein~~ the set-up of a logical and physical connection is defined as an intelligent network event of the control record (~~2-11~~).

19. (Currently Amended) A packet network node (~~SGSN, GGSN~~) comprising ~~a connection part (CP) to transfer packets and set up a connection to the packet network; and~~

c2 an application part (~~AP~~) to establish and maintain a session for routing functionality of the packets originating from and terminating at a user; ~~characterized in that the application part (AP) is being~~ arranged to form a control record for the session in such a manner that at least one of the session events is defined in the control record as an intelligent network event, the encounter of which causes the use of intelligent network control principles, and to use the intelligent network control principles in response to the encounter with the intelligent network event;

~~the node further comprises session management means (BSM) for detecting the encounter with the intelligent network event; and~~

~~the application part (AP) is arranged to use the intelligent network control principles in response to the encounter with the intelligent network event; and~~

~~the a connection part (CP) is arranged to transfer packets, to set up a connection to the packet network; and to convey messages between the intelligent network and the application part.~~

20. (Currently Amended) A packet network node as claimed in claim 19, ~~characterized in that wherein~~

the application part (~~AP~~) is arranged to obtain the intelligent network events defined in the subscriber ~~information; information;~~ and

the session management means (~~BSM~~) are arranged to detect the encounter with the intelligent network events.

21. (Currently Amended) A packet network node as claimed in claim 19,
~~characterized in that~~ wherein
the network node comprises a memory part (~~MP~~), in which at least one intelligent
network event is defined; and
the session management means (~~BSM~~) are arranged to detect the encounter with an
intelligent network event.

C2 22. (Currently Amended) A packet network node as claimed in claim 19,
~~characterized in that~~ wherein the application part (~~AP~~) is arranged to form a control record
for the session and to use the intelligent network control principles in response to the GPRS
attach of the user.

23. (Currently Amended) A packet network node as claimed in claim 19,
~~characterized in that~~ wherein the application part (~~AP~~) is arranged to form a control record
for the session and to use the intelligent network control principles in response to the ~~PDP~~
packet data protocol context activation of the user.

24. (Currently Amended) A packet network node as claimed in claim 19,
~~characterized in that it is~~ the packet network node being a serving support node of the packet
radio network (~~SGSN~~).

25. (Currently Amended) A packet network node as claimed in claim 19,
~~characterized in that it is~~ the packet network node being a gateway support node of the
packet radio network (~~GGSN~~).
